ORIGINAL



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2017 MAY -4 P 3: 28

Arizona Corporation Commission

DOCKETED

MAY 4 2017

DOCKETED BY

BEFORE THE ARIZONA CORPORATION COMMISSION

TOM FORESE, Chairman BOB BURNS DOUG LITTLE ANDY TOBIN BOYD W. DUNN

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN.

Docket No. E-01345A-16-0036

IN THE MATTER OF FUEL AND PURCHASED POWER PROCUREMENT AUDITS FOR ARIZONA PUBLIC SERVICE COMPANY.

Docket No. E-01345A-16-0123

NOTICE OF FILING CORRECTED SWEEP EXHIBIT 6 AND RELATED CORRECTIONS TO SWEEP EXHIBIT 4

Southwest Energy Efficiency Project ("SWEEP") hereby provides notice that it is filing a revised SWEEP Exhibit No. 6 and related changes to SWEEP Exhibit No. 4, which is Jeff Schlegel's rebuttal testimony regarding the proposed settlement agreement. These revisions

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relate to a spreadsheet cell reference error on SWEEP Exhibit 6 that was discussed at the hearing on May 2, 2017. The revisions in SWEEP Exhibit 6 only affect the three columns showing the change from E-12 to R-Basic Large for the columns labeled \$ Change, % Change and % of Billed Change from BSC Increase. The corrections are also reflected in the attached revisions to SWEEP Exhibit No. 4, page 11 (lines 13 and 15) and SWEEP attachment JAS-3SR to SWEEP Exhibit No. 4, which are also attached.

The Administrative Law Judge also directed SWEEP to prepare two new exhibits denominated as SWEEP Exhibits 8A and 8B showing the bill impact analysis using SWEEP's rate design and its alternative rate design for R-XS, R-Basic and R-Basic Large rates. SWEEP is in the process of obtaining the data necessary to prepare those exhibits from APS and will file them as soon as the data is available.

DATED this 4th day of May, 2017.

ARIZONA CENTER FOR LAW IN THE PUBLIC INTEREST

By Timothy M. Hogan

514 W. Roosevelt Street

Phoenix, Arizona 85003

Attorneys for Southwest Energy Efficiency Project

ORIGINAL and 13 COPIES of the foregoing filed this 4th day of May, 2017, with:

Docketing Supervisor Docket Control Arizona Corporation Commission 1200 W. Washington Phoenix, AZ 85007 COPIES of the foregoing electronically mailed this 4th day of May, 2017, to:

All Parties of Record

offen

| CORRECTED | SWEEP | Exhibit 6 | 5 | |
|-------------|--------|-----------|---------|------------------|
| Docket Nos. | E-0134 | 5A-16-00 | 036 and | E-01345A-16-0123 |

CORRECTED SWEEP Exhibit 6, Attachment JAS-3SR

SWEEP Analysis of Bill Impacts Based on Limited Bill Impact Data Available at the Time of Rebuttal

Earlier revisions: additional cells filled in for % change in summer table; additional shading in first row; winter comparison table added on page 2

| ummer | Comparison | | | | | | | | | | | | | | | | |
|-----------|---------------|-----------|---------|------|-----------|------|------------|------|------------|-------------|--------|-----------------|---------------|-------------------|-----------------|------------------|-------------------|
| | | | | | | | | | | Corrected 0 | olumn | | | Corrected Column | | | Corrected Colum |
| otal Bill | | | | | | | hange | | | | | % Change | | | % of Bill Chang | ge from BSC Incr | ease |
| sage | E-12 w/Adj \$ | R-XS | R-Basic | 5 | R-Basic L | E-13 | 2 to R-XS. | E-12 | to R-Basic | E-12 to R-B | asic L | E-12 to R-XS E- | 12 to R-Basic | E-12 to R-Basic L | | | E-12 to R-Basic I |
| 100 | \$ 19.61 | | \$ 27 | 7.39 | \$ 33.43 | \$ | 2.07 | S | 7.78 | 5 | 13.81 | 11% | | | 65% | | |
| 200 | \$ 30.56 | \$ 33.35 | \$ 36 | 9.78 | \$ 46.84 | 5 | 2.80 | \$ | 9.23 | S | 16.28 | 9% | | | 48% | | |
| 300 | \$ 41.50 | \$ 45.02 | \$ 52 | 2.18 | \$ 60.25 | \$ | 3.52 | \$ | 10.68 | S | 18.75 | 8% | | | 38% | | |
| 400 | \$ 52.44 | \$ 56.70 | \$ 64 | 4.57 | \$ 73.66 | \$ | 4.25 | \$ | 12.12 | \$ | 21.22 | 8% | | | 31% | | |
| 500 | \$ 67.52 | \$ 68.37 | \$ 76 | 3.96 | \$ 87.08 | \$ | 0.85 | S | 9.44 | | 19.56 | 1% | | | 157% | | |
| 600 | \$ 82.59 | \$ 80.04 | \$ 86 | 3.36 | \$ 100.49 | \$ | (2.55) | 5 | 6.76 | \$ | 17.90 | -3% | 8% | | -52% | 94% | 12 |
| 700 | \$ 97.67 | \$ 91.71 | \$ 101 | 1.75 | \$ 113.90 | \$ | (5.95) | S | 4.08 | \$ | 16.23 | -6% | 4% | | -22% | 155% | |
| 800 | \$ 112,74 | \$ 103.38 | \$ 114 | 1.14 | \$ 127.31 | \$ | (9.36) | \$ | 1.40 | \$ | 14.57 | | 1% | | 7 | 451% | |
| 900 | \$130.16 | \$ 115.06 | \$ 125 | 3.53 | \$ 140.72 | \$ | (15.11) | \$ | (3.63) | S | 10.56 | | -3% | | | -174% | |
| 1000 | \$ 147.59 | \$ 126.73 | \$ 138 | 3.93 | \$ 154,14 | S | (20.86) | 5 | (8.66) | | 6.55 | | 6% | 4% | | -73% | 173 |
| 1100 | \$ 165.01 | \$ 138.40 | \$ 151 | .32 | \$ 167.55 | \$ | (26.61) | S | (13.69) | | 2.54 | | -8% | 2% | | -46% | 447 |
| 1200 | \$ 182.43 | \$ 150.07 | \$ 163 | 3.71 | \$ 180.96 | \$ | (32.36) | 5 | (18.72) | | (1.47) | | -10% | -1% | | -34% | -770 |
| 1300 | \$ 199.86 | \$ 161.74 | \$ 176 | 3.11 | \$ 194.37 | S | (38.11) | S | (23.75) | S | (5.49) | | | -3% | | 0170 | -207 |
| 1400 | \$ 217.28 | \$ 173.42 | \$ 186 | 3.50 | \$ 207.78 | S | (43.87) | S | (28.78) | 5 | (9.50) | | | -4% | 75 75 | | -1194 |
| 1500 | \$ 234.71 | \$ 185.09 | \$ 200 | 0.89 | \$ 221.20 | S | (49.62) | S | (33.81) | | 13.51) | | | -6% | | | -84 |
| 1600 | \$ 252.13 | \$ 196.76 | \$ 213 | 3.29 | \$ 234.61 | S | (55.37) | | (38.84) | 5 | 17.52) | | | -7% | | | -65' |
| 1700 | \$ 269.55 | \$ 208.43 | \$ 225 | 5.68 | \$ 248.02 | S | (61.12) | | (43.87) | | 21.53) | | | -8% | | | -531 |
| 1800 | \$ 286.98 | \$ 220.10 | \$ 238 | 3.07 | \$ 261.43 | 5 | (66.87) | | (48.91) | | 25.54) | | | -9% | | | -44 |
| 1900 | \$ 304.40 | \$ 231.78 | \$ 250 | | \$ 274.84 | S | (72.62) | | (53.94) | | 29 56) | | | -10% | - | - | -385 |
| 2000 | \$ 321.82 | \$ 243.45 | \$ 262 | 2.86 | \$ 288.26 | S | (78.38) | | (58.97) | | 33.57) | | | -10% | - | | -349 |

Based on data APS provided in response to SWEEP 2.1 (04/14/17 and 04/17/17)

Change in Residential Basic Service Charges (BSCs)

| Based on a | 30.42 | day mo | nth | | |
|------------|-------|--------|--------|-----------|------------|
| Rate | BSC | | Change | from E-12 | % Increase |
| E-12 | 5 | 8.67 | | | |
| R-XS | S | 10.01 | 5 | 1.34 | 15% |
| R-Basic | 5 | 15.00 | S | 6.33 | 73% |
| R-Basic L | 5 | 20.02 | S | 11.35 | 131% |

| CORRECTED | SWEEP Exhibit 6 |
|-------------|---------------------------------------|
| Docket Nos. | E-01345A-16-0036 and E-01345A-16-0123 |

Winter Comparison

| Winter C | Comparison | | | | | | | | | | | | | | | |
|-----------|---------------|-----------|-----|--------|-----------|-----------|-------|---------------|-------|-------------------|--------------|-----------------|-------------------|----------------|------------------|-------------------|
| | | | | | | | | | (| Corrected Column | | | Corrected Column | | | Corrected Column |
| otal Bill | | | | | | \$ Chang | | | | | % Change | | | % of Bill Chan | ge from BSC Incr | |
| | E-12 w/Adj \$ | R-XS | R-8 | Basic | R-Basic L | E-12 to F | R-XS | E-12 to R-Bas | sic E | E-12 to R-Basic L | E-12 to R-XS | E-12 to R-Basic | E-12 to R-Basic L | | | E-12 to R-Basic L |
| 82 | \$ 17.64 | \$ 19.58 | S | 25.16 | \$ 31.01 | \$ | 1.94 | \$ 7.5 | 52 | \$ 13.37 | 11% | | | 69% | | |
| 164 | \$ 26.62 | \$ 29.15 | \$ | 35.32 | \$ 42.01 | S | 2.53 | \$ 8.7 | 70 | \$ 15.39 | 10% | | | 53% | | |
| 246 | \$ 35.59 | \$ 38.72 | \$ | 45.48 | \$ 53.01 | \$ | 3.13 | \$ 9.8 | 39 | \$ 17.42 | 9% | | | 43% | | |
| 328 | \$ 44.57 | \$ 48.29 | \$ | 55.65 | \$ 64.01 | \$ | 3.73 | \$ 11.0 | 18 | \$ 19.44 | 8% | | 1 | 36% | | |
| 410 | \$ 53.54 | \$ 57.86 | \$ | 65.81 | \$ 75.01 | \$ | 4.32 | \$ 12.2 | 27 | \$ 21,47 | 8% | | | 31% | | |
| 492 | \$ 62.51 | \$ 67.43 | 5 | 75.97 | \$ 86.00 | 5 | 4.92 | \$ 13.4 | 16 | \$ 23,49 | 8% | 22% | | 27% | 47% | |
| 455 | \$ 58.46 | \$ 63.12 | \$ | 71.39 | \$ 81.04 | \$ | 4.65 | \$ 12.9 | 32 | \$ 22.58 | 8% | 22% | | 29% | 49% | |
| 520 | \$ 65.58 | \$ 70.70 | \$ | 79.44 | \$ 89.76 | \$ | 5.13 | \$ 13.8 | 86 | \$ 24.18 | | 21% | | 2011 | 46% | |
| 585 | \$ 72.69 | \$ 78.29 | \$ | 87.50 | \$ 98.48 | \$ | 5.60 | \$ 14.8 | 11 | \$ 25,79 | | 20% | | | 43% | |
| 580 | \$ 72.14 | \$ 77.71 | \$ | 86.88 | \$ 97.81 | S | 5.56 | \$ 14.7 | 3 | \$ 25.66 | 1 | 20% | 36% | | 43% | 44% |
| 638 | \$ 78.49 | \$ 84.48 | \$ | 94.06 | \$ 105.58 | \$ | 5.98 | \$ 15.5 | 7 | \$ 27.09 | | 20% | 35% | 1 | 41% | 42% |
| 696 | \$ 84.84 | \$ 91.25 | \$ | 101.25 | \$ 113.36 | \$ | 6.41 | \$ 16.4 | 1 | \$ 28.53 | | 19% | 34% | | 39% | 40% |
| 754 | \$ 91.19 | \$ 98.02 | \$ | 108.44 | \$ 121.14 | S | 6.83 | \$ 17.2 | 6 | \$ 29.96 | | | 33% | | 3374 | 38% |
| 812 | \$ 97.53 | \$ 104.78 | S | 115.63 | \$ 128.92 | \$ | 7.25 | \$ 18.1 | 0 | \$ 31.39 | | | 32% | | | 36% |
| 870 | \$ 103.88 | \$ 111.55 | 5 | 122.82 | \$ 136.70 | \$ | 7.67 | \$ 18.9 | 14 | | | | 32% | | | 35% |
| 928 | \$ 110.23 | \$ 118.32 | \$ | 130.00 | \$ 144.48 | \$ | 8.10 | | 8 | | | | 31% | - | | 33% |
| 986 | \$ 116.57 | \$ 125.09 | S | 137.19 | \$ 152.26 | \$ | 8.52 | | | | | | 31% | | | 32% |
| 1116 | \$ 130.80 | \$ 140.27 | \$ | 153.30 | \$ 169.69 | \$ | 9.47 | | | | | | 30% | | | 29% |
| 1178 | \$ 137.59 | \$ 147.50 | \$ | 160.99 | \$ 178.01 | \$ | 9.92 | | | | | | 29% | | | 28% |
| 1240 | \$ 144.37 | \$ 154.74 | S | 168.67 | \$ 186.33 | | 10.37 | | | | | | 29% | | | 27% |

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

TOM FORESE, CHAIRMAN BOB BURNS DOUG LITTLE ANDY TOBIN BOYD DUNN

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN.

Docket No. E-01345A-16-0036

IN THE MATTER OF FUEL AND PURCHASED POWER PROCUREMENT AUDITS FOR ARIZONA PUBLIC SERVICE COMPANY.

Docket No. E-01345A-16-0123

CORRECTED PAGES of Rebuttal Testimony of

Jeff Schlegel

Southwest Energy Efficiency Project (SWEEP)

on the Proposed Settlement Agreement

May 4, 2017

receive a significant rate increase, and then experience all or most of the increase as an increase in the fixed charge (BSC) – which is a double whammy for customers. For example, consider a customer on the R-Basic rate with a summer bill of 700 kWh per month. This customer's bill increases \$4.08 per month, but the BSC increase is \$6.33 per month – more than the total bill increase. Another example is a customer using 800 kWh per month in the summer, whose bill increases \$1.40 per month, but the BSC increase is \$6.33 per month. Customers are losing the opportunity to control their bills and mitigate the effects of the rate increase.

2. SWEEP observed some strange, incongruous patterns across the three residential rates analyzed, with some very significant differences for customer bills and changes in customer bills with just a 1 kWh change in average usage. For example, a customer using 600kWh on average would have a summer bill of \$80.04 on R-XS. But if that customer increased average usage to 601 kWh, then their summer bill would be \$89.36 per month. This also means this customer would receive either a 3% bill decrease or an 8% bill increase depending on whether their average annual usage was 600 kWh or 601 kWh per month. See the similar effects for a customer with average annual usage around 1000 kWh per month, shown in JAS-3SR.

Both of these negative consequences are caused in part by the stepped increases in the BSCs for R-Basic and R-Basic Large rates.

- Q. What does SWEEP recommend the Commission could do to remedy or reduce the negative consequences observed in SWEEP's analysis?
- A. One solution to both of these negative consequences is to reduce the BSCs, and in particular, to reject or reduce the proposed BSC increases.
- IV. RECOMMENDED RATE DESIGN: PROPERLY DESIGNED TOU RATES WITH A SHORTER ON-PEAK PERIOD AND LOWER BSCS.
- Q. What do you recommend as the appropriate and effective rate design for residential customers?
- A. Properly designed, customer-friendly time-of-use rates are the most appropriate and effective rate design for APS residential customers. Time-of-use (TOU) rates are a superior rate design for reducing peak demands and are well known and understood by customers.
 - Properly designed TOU rates should have lower BSCs and shorter on-peak windows that customers can actually work with as a better alterative than higher fixed charges for customers and higher BSCs in particular.

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SWEEP Analysis of Bill Impacts Based on Limited Bill Impacts Data Available at the Time of Rebuttal

| Summe | Summer Comparison | ç | | | | | | | | | | | | |
|-------------------|--------------------|--------------------------------------|---------------------|-----------|-------------|--------------|-------------|--|--------------|--|-------------------|----------------|---|-------------------|
| | | | | | | | Ŝ | Corrected Column | | | Corrected Column | | | Corrected Column |
| Total Bill Summer | Summer | | | | \$ Change | | | | % Change | | | % of Bill Chan | % of Bill Change from BSC Increase | ease |
| Usage | E-12 w/Adj \$ R-XS | R-XS | R-Basic | R-Basic L | E-12 to R-> | XS E-12 to 1 | R-Basic E-1 | o R-XS E-12 to R-Basic E-12 to R-Basic L | E-12 to R-XS | E-12 to R-XS E-12 to R-Basic E-12 to R-Basic | E-12 to R-Basic L | E-12 to R-XS | E-12 to R-XS [E-12 to R-Basic E-12 to R-Basic | E-12 to R-Basic L |
| | \$ 19.61 | \$ 21.68 \$ | \$ 27.39 \$ | \$ 33.43 | \$ 2 | 2.07 \$ | 7.78 \$ | 13.81 | 11% | | | 65% | | |
| 200 | \$ 30.56 | s | | | \$ 2. | 2.80 \$ | 9.23 \$ | 16.28 | %6 | | | 48% | | |
| 300 | \$ 41.50 | \$ 45.02 | \$ 52.18 | \$ 60.25 | \$ 3 | 3.52 \$ | 10.68 | 18.75 | 8% | | | 38% | | |
| 400 | \$ 52.44 | s | S | s | \$ 4. | 4.25 \$ | 12.12 \$ | 21.22 | 8% | | | 31% | | |
| 200 | \$ 67.52 | \$ 68.37 | \$ 76.96 | \$ 87.08 | \$ 0. | 0.85 | 9.44 | 19.56 | 1% | | | 157% | | |
| 009 | \$ 82.59 \$ | | | Г | \$ (2 | (2.55) \$ | 6.76 | 17.90 | -3% | 8% | | -52% | 94% | |
| 200 | ક્ક | \$ 91.71 \$ | \$ 101.75 \$ | \$ 113.90 | \$ (5. | (5,95) | 4.08 | 16.23 | %9- | 4% | | -22% | 155% | |
| \$ 008 | \$ 112.74 | S | \$ 114.14 \$ | | 8 (9. | (9.36) | 1.40 \$ | 14.57 | | | | | | |
| 900 | \$ 130.16 \$ | \$ 115.06 | 115.06 \$ 126.53 \$ | \$ 140.72 | \$ (15. | (15,11) \$ | (3.63) \$ | 10.56 | | -3% | | | -174% | |
| 1000 | | | 126.73 \$ 138.93 \$ | \$ 154.14 | \$ (20. | (20.86) \$ | (8,66) | 6.55 | | %9- | 4% | | -73% | 173% |
| 1100 | | | 138.40 \$ 151.32 \$ | \$ 167.55 | \$ (26. | (26.61) \$ | (13.69) \$ | 2.54 | | -8% | 2% | | -46% | 447% |
| 1200 \$ | | \$ 150.07 | 150.07 \$ 163.71 | \$ 180.96 | \$ (32. | (32.36) \$ | (18.72) \$ | (1.47) | | -10% | -1% | | -34% | -770% |
| 1300 \$ | | \$ 161.74 | 161.74 \$ 176.11 \$ | \$ 194.37 | \$ (38. | (38.11) \$ | (23.75) \$ | (5.49) | | | -3% | | | -207% |
| 1400 | \$ 217.28 \$ | | 173.42 \$ 188.50 \$ | \$ 207.78 | \$ (43. | (43.87) \$ | (28.78) \$ | (6.50) | | | -4% | | | -119% |
| 1500 | ₩ | 234.71 \$ 185.09 \$ 200.89 \$ 221.20 | \$ 200.89 | \$ 221.20 | \$ (49. | (49.62) \$ | (33.81) \$ | (13.51) | | | %9- | | | -84% |
| 1600 \$ | | \$ 196.76 \$ | \$ 213.29 \$ | \$ 234.61 | \$ (55. | (55.37) \$ | (38.84) \$ | (17.52) | | | -1% | | | -65% |
| 1700 | es. | 269.55 \$ 208.43 \$ 225.68 \$ 248.02 | \$ 225.68 | \$ 248.02 | \$ (61. | (61.12) \$ | (43.87) \$ | (21.53) | | | -8% | | | -53% |
| 1800 \$ | | \$ 220.10 | 220.10 \$ 238.07 \$ | \$ 261.43 | \$ (66. | (66.87) \$ | (48.91) \$ | (25.54) | | | %6- | | | -44% |
| 1900 | ss | 304.40 \$ 231.78 \$ 250.46 \$ 274.84 | \$ 250.46 | \$ 274.84 | \$ (72. | (72.62) \$ | (53.94) \$ | (29.56) | | | -10% | | | -38% |
| 2000 | | 321.82 \$ 243.45 \$ 262.86 \$ | \$ 262.86 | \$ 288.26 | 8// | (78.38) \$ | /58 971 S | (33 57) | | | -10% | | | 240/ |

| (BSCs) | |
|---------------------------------|----------------------------|
| Charges | |
| al Basic Service Charges (BSCs) | |
| Basic S | honth |
| Change in Residential | Raced on a 30.42 day month |
| e in Res | 00 000 |
| Chang | Bacad |
| | |

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| based on a 30.42 day month | 30.42 (| Jay mor | III | | |
|----------------------------|---------|---------|------------------------------|------------|--|
| Rate | BSC | | Change from E-12 % Increase | % Increase | |
| E-12 | ↔ | 8.67 | | | |
| R-XS | 8 | 10.01 | \$ 1.34 | 15% | |
| R-Basic | s | 15.00 | \$ 6.33 | 73% | |
| R-Basic L | 8 | 20.02 | \$ 11.35 | 131% | |

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